

**AUTOMATED FLIGHT INSPECTION SYSTEM (AFIS)  
SOFTWARE CONFIGURATION CONTROL TEAM**

Minutes of Meeting 2/4/98

1. ATTENDEES:

<u>Name</u>	<u>Routing</u>	<u>Phone</u>
Lin Ballard	AVN-210	X41081
John Lufkin	AVN-210	X47936
Glenn Bissonette	AVN-210	X45934
Steve Kennedy	AVN-210	X46440
Peggy Burch	AVN-230	X44526
John Heiderstadt	AVN-307	X40972
Al Castro	AVN-307	X48521
Ray Gambill	AVN-307	X44011

2. AGENDA ITEMS. Lin Ballard, team chairman, distributed copies of the agenda items detailing the software change requests (SCRs) to be considered by the team (attachment 1). Actions taken were as follows:
- a. SCR-97-035. Mr. Ballard recommended this SCR be cancelled because it is redundant to the content of SCR-98-048. It was further recommended that SCR-98-048 be implemented prior to Software Revision G because it is comprehensive and coincides with Order 8240.47. Mr. Ballard said he will provide an advance copy of the proposed Statement of Work to Parker Hannafin and a courtesy copy to Brenda Hagar (AVN-307) for formal submission after a cursory review of the advance copy by Mr. Kwaritoff of Parker. These recommendations were approved by the team.
  - b. SCR-98-046. Mr. Ballard recommended this SCR be deferred and that AVN-230 prepare a change to the flight inspection manual (Order 8200.1A). The change to 8200.1A will allow the AFIS and the FI manual to be compatible. The team approved this recommendation and AVN-230 has the action to change the manual.
  - c. SCR-98-047. Mr. Ballard recommended approval of this SCR. The team voted accordingly.
  - d. SCR-98-048. This 15-part SCR was approved as discussed under SCR-97-035 above, but was redefined to remove the requirement for MLS-3 glide path elevation analyzation. See attachment 1 reflecting the change. This SCR evolved from the conference orchestrated by AVN-200 among Ohio University, Parker Hannafin and Sierra representatives the week of 1-26-98.
  - e. GFIS SCRs. The following actions were recommended and approved for the respective SCR:
    - (1) Corrections. Previous SOWs now at Parker Hannafin will be modified to include contents of SCRs GF-97-006, GF-97-008, GF-97-010, GF-98-023, GF-98-024 and GF-98-025. Mr. Heiderstadt will identify these SCRs to the specific respective SOW and forward the SOW amendments formally to Parker Hannafin through Ms. Hagar and Carolyn Hudson, the FAA Contracting Officer.
- New SOW. GF-98-026 will require preparation of a new SOW for submission to Parker Hannafin. AVN-210 to provide information to Mr. Heiderstadt, AVN-307, for SOW development.
- (1) In-House Work. GF-97-019 will be accomplished by AVN-22. This SCR will initiate a program to automatically generate SIAP files for GFIS.

1. OTHER DISCUSSIONS:

- a. Mr. Heiderstadt asked whether SCR-97 038, item 3, should be changed to reflect “EL” to “AZ.” This change was approved.
- b. Mr. Heiderstadt was requested to remind Parker Hannafin to include respective updates to the GFIS operations manual to correspond to the contents of each software package delivered to FAA.
- c. In answer to a question from Mr. Heiderstadt, Mr. Ballard said the “back course TVPS” procedure in Revision F Software needs to be test-flown, but was not on the revision list received from Parker Hannafin.
- d. The SCCT agreed that Hawker ACARS mods need to be discretely identified and controlled. At the suggestion of Mr. Heiderstadt, it was agreed that SCRs pertaining to Hawker ACARS items will be prefixed “HA” in the SCR database maintained by AVN-307.

1. NEXT MEETING: Mr. Ballard said the next SCCT meeting will be called when sufficient SCR activity justifies one.

**FILECODE:H007RG/SCCTMTG4**

## Attachment 1

### SOFTWARE ITEMS TO BE ADDRESSED/REDRESSED AT 2-4-98 SCCT MEETING

Note: Have numbered to current year, and continuity in numerical sequence.

- SCR 97-035      BFSL RDH announcement, Ballard to provide specifics based on Jan symposium, for delivery to Gull. (THIS ITEM CANCELED, AND REACTIVATED IN SCR98-048)
- SCR98-046      Detailed Description: Page 217-30 par. 217.3311 (a). The transverse structure calibration for Localizer and Glideslope crosspointers specified by this paragraph cannot be met by AFIS. AFIS crosspointer calibration cannot presently be independently changed to have a 400 calibration on the Loc crosspointer and a 150 ua cal on the Glideslope. Change the requirements to provide for individual crosspointer calibration settings.
- SCR98-047      Provide numerical key menu selection on the Data Link Menu page (1 of 1), to reduce confusion, and unnecessary SPD key presses. (The tendency is to select the numeric)
- SCR98-048      BFSL: The following changes are requested for an engineering test release tape for evaluation.

Change ILS-3 and ~~MLS-3~~ Glide path Elevation analyzation to the following:

1. Analyze the complete zone 2 using a Best Fit Straight Line (BFSL) to provide the announced angle, projected Zone 2 Reference datum Height (RDH) and projected Ground Point of Intercept (GPI).
2. Delete the mean path angle results from all calculations.
3. Delete the MEAN PA, Z2BF DHT, and Z2BF TAN on the ILS-3 NAV/TEST CTRL DATA page 3 and 4.
4. Analyze from 6000 ft. prior to Threshold to Point "C" using BFSL to provide the announced Achieved Reference Datum Height (ARDH).
5. All angle, RDH, GPI, and ARDH calculations will provide results based on the downward projections of the computed BFSL referenced to the runway centerline at Threshold. These computations shall be independent of antenna offset and elevation.
6. The mean width checks shall be calculated from a BFSL process.
7. The announced values of Zone 3 structure and values at Points "B", "C", and "T" can be verified by analysis of the 2nd corrected error trace.
8. The ILS-3 Nav/Test CTRL Data pages 3 and 4 results shall have RDH relabeled to "Z2 BF RDH".

9. The ILS-3 Nav/Test CTRL Data pages 3 and 4 run results shall have GPI relabeled to "Z2 BF GPI RNG".
10. The ILS-3 Nav/Test CTRL Dat page 4 shall have a toggle labeled "RESULTS VALIDATED: "YES" or "NO". This toggle will control the name of the present "INITIAL" column. A "NO" selection will keep the label of INITIAL, and a "YES" selection will change the column name to "FINAL".
11. This "INITIAL/FINAL column will have the ARDH results calculated as the average ARDH of the 3 runs used on page 4. The Z2 BF GPI will be the average of the Z2 BF GPI of the 3 runs used. The angle will be the commissioned angle.
12. On the ILS-3 Nav/Test CTRL Data page 4 in the PARAMETER block, delete the information and columns labeled Z2BFPA, MEAN PA, AND AVE.
13. RDH, ARDH, AND GPI values will be rounded to the first decimal place.
14. All ILS-2 measurements remain in their present form.
15. All of the above changes are applicable to both simulators.

GF97-006            Correct the battery overheat problem that often occurs when the batteries are placed in the deep cycle charging mode.

GF97-008            Correct the software hang that consistently occurs using the ground station when a report is saved on a desktop configuration.  
? I don't have a resolution.

GF97-010            Correct keyboard delay to process realistic typing speeds.  
The addition of a Software switch (i.e.: GFIS/D) will be added to allow desktop operation with the software not entering or branching to routines not required during the entering of facility or SIAP data.

GF97-019            Provide a GFIS data loading capability to allow GPS procedure waypoints to be entered electronically versus manually. May involve a file utility to convert the Jeppesen or approved GPS database used in flight inspection to a format that loads in the GFIS.

GF 98-023            The mouse does not function in the main menu after selecting the "Done" flight inspection report option. You must force close the program and re-open the Ground station software to continue working on another inspection data file.  
Submitter:        1/6/98 Glen Bissonette AVN-210

GF 98-024            The "inspection data" return to main menu toolbar option does not work with a mouse click. You must use the hot key "alt" "X"  
Submitter:        1/6/98 Glen Bissonette AVN-210

- GF 98-025      The plotted bearing MIN and MAX sliders should default to 5 degrees either side of the flight plan ground track for the file being plotted. This allow the bearing of the file being plotted to be in the center of the graph. The trace presently is defaulted off scale.  
Submitter:      1/6/98 Glen Bissonette AVN-210
- GF 98-026      GPS NP Plot page should allow selection of GFIS log files from within the plot page instead of requiring the user to exit this page, selecting another file from the run select main menu option and then reentering the GPS NP Plot Page. Providing a file select drop down list of all available stored GFIS log files that can be sequentially recalled, viewed, and printed from within the page is more efficient. The user could select and print all of the required files for several different inspections from one efficient location.  
Submitter:      1/7/98 Glen Bissonette AVN-210